

**TO: Suborbital Science Program
NASA Headquarters
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Flight Report

Aircraft :	Kenn Borek Air DC-3T Basler
Operating Site(s) From / To :	NZIR/NZIR
Flight Date :	December 1, 2009 (NZDT)
Flight Number / Data Flight # :	F13 / 10
Time out:	0135 UTC
Time in:	0825 UTC
Flight Time :	7 hrs
Flt Request # / PI:	NASA 20090602-084128 (Blankenship)
Purpose of Flight :	Data [X] Ferry [] Functional Check [] Other []
Sensor Payload :	University of Texas at Austin HiCARS ice penetrating radar; UT Reigl LD-90 laser distance meter; UT Geometrics 823-A magnetometer; USAF Sigma Space photon counting lidar, NGA BGM-3 gravity meter; JPL WISE ice penetrating radar
Comments :	The aircraft flew a radial flight to the south of McMurdo, via Byrd Glacier, from McMurdo's sea ice runway to the major subglacial basin surrounding the South Pole. The radar, laser altimeter, lidar prototype and gravity and magnetic fields instruments all performed excellently. WISE was operated successfully on the outbound leg, imaging internal layers and in many cases the bed. Deployment of the long trailing wire antenna went smoothly. HiCARS was operated on the returning leg, successfully penetrating Byrd Glacier during a drape of the glacier.

SUBMITTED BY: Duncan Young 10 December 2009